

CLAIM(S)

What is claimed is:

1. A method for the manufacture of a printed electric circuit having at least one electronic component selected from the group consisting of conductor, resistor, capacitor and inductor, the method comprising:
 - (a) ink jet printing on a substrate having at least one layer, at least one patterned layer of an ink jet printable composition comprising:
 - (4) functional material wherein the functional material comprises one or more substances selected from the group consisting of elements, compounds and mixtures of thereof having electrical properties,
 - (5) organic polymer comprising polyvinylpyrrolidone; dispersed in
 - (6) dispersion vehicle selected from organic solvent, water, or mixtures thereof;
 - and wherein the viscosity of said composition is between 5 mPa.s to 50 mPa.s at a temperature of 25 to 35°C,
 - (b) firing said substrate and ink composition of (b).
2. The method of claim 1 wherein the substrate comprises a plurality of layers, step (a) and (b) are replaced by:
 - (i) forming a patterned array of vias in a plurality of layers of said substrate;
 - (ii) filling the vias in the substrate layer(s) of step (b) with the ink jet printable composition; followed by
 - (iii) ink jet printing at least one patterned conductive layer of the ink composition over the surface of each of the via-filled substrate layers; then replacing step (b) with the following steps:
 - (iv) laminating the printed substrate layers of step (iii) to form an assemblage comprising a plurality of unfired interconnected functional layers separated by unfired substrate;
 - (v) ink jet printing at least one patterned layer of the ink composition over the assemblage of step (iv); and followed by step (b).